

ABSTRACT

The invention relates to a petrol internal combustion engine with controlled ignition, comprising at least one cylinder (1), a cylinder head (2), sealing the cylinder (1), a piston (3), a combustion chamber (4), a petrol injection means (5), an ignition means (6), for production of an ignition of the air/petrol mixture in the combustion chamber, inlet (7) and exhaust (8) valves, selectively sealing the combustion chamber (4), an injection pump (8), for supplying the injector (5) with petrol under pressure, characterized in that the pressure of the petrol, provided to the injector (5), exceeds 250 bars and that at least in one operating range for the engine subject to the phenomenon of knocking, the amount of petrol delivered by the pump (8) to the injector (5) for one combustion cycle is divided into a number of partial and distinct injections and at least one of said partial injections is delivered before ignition of the charge in the combustion chamber (4) by the ignition means (6) and at least one partial injection is delivered after said ignition.